

**STABILIZATION METHOD FOR DRAIN VOLTAGE IN NON-VOLATILE  
MULTI-LEVEL MEMORY CELLS AND RELATED MEMORY DEVICE**

**Abstract of the Disclosure**

A method and an electronic device for stabilizing the voltage on the drain terminals of multi-level non-volatile memory cells during programming thereof. The voltage is provided by a drain voltage regulator having an output connected to the drain terminals at a common circuit node by a metal line conduction path having a parasitic intrinsic resistance. A feedback path is advantageously provided between the common circuit node and an input of the regulator.